

mm.),  $5\frac{1}{4}$  whorls. Type lot varying from  $16.4 \times 103$  (16.9 mm.) with 6 wh. to  $11.6 \times 135$  (15.5 mm.) with 5 whorls.

Type locality (ANSP. 163924): WWC.

---

## BURROWING OF SNAILS

BY DAVID T. JONES

Associate Professor of Zoology  
University of Utah, Salt Lake City, Utah

While testing temperature reactions of the tiger snail, *Anguispira alternata* (Say), in December of 1932, it was noted that this snail followed a somewhat regular procedure in burrowing which was correlated with certain temperatures. Continuing these observations in December, 1934, I found Utah snails behaved somewhat similarly. The work on *A. alternata* was done in the Zoology Department of Indiana University, with snails secured the same day from the campus. At Utah, the snails had to be collected several weeks prior to the experiments, but they were kept in cool places under conditions as nearly normal as possible. The specimens of *Oreohelix depressa* (Cockerell) and *Discus anthonyi* (Pilsbry) came from City Creek Canyon near Salt Lake City, those of *Physa ampullacea* Gould and *Stagnicola nuttalliana* (Lea) came from the Weber River at Gateway, and those of *Gyraulus vermicularis* (Gould) from Oakley, Utah, farther up Weber Canyon.<sup>1</sup>

All tests were made out-of-doors using a liter Erlenmeyer flask, fitted with a two-holed rubber stopper, one hole communicating with the exterior, the other containing a two-inch immersion Centigrade thermometer. Loose soil was placed in the bottom of the flask in all cases. In the case of aquatic snails the sediment was allowed to settle before beginning the experiment. In the case of land snails, the soil and the sides of the flask were moistened to maintain 100% relative humidity. The barometric pressure was not controlled but was allowed to vary naturally with weather and altitude, as specimens of

---

<sup>1</sup> "Mollusks from Weber Canyon" by David T. Jones, Proc. Utah Acad. Sci., Arts, and Letters, forthcoming Vol. XII, 1935.

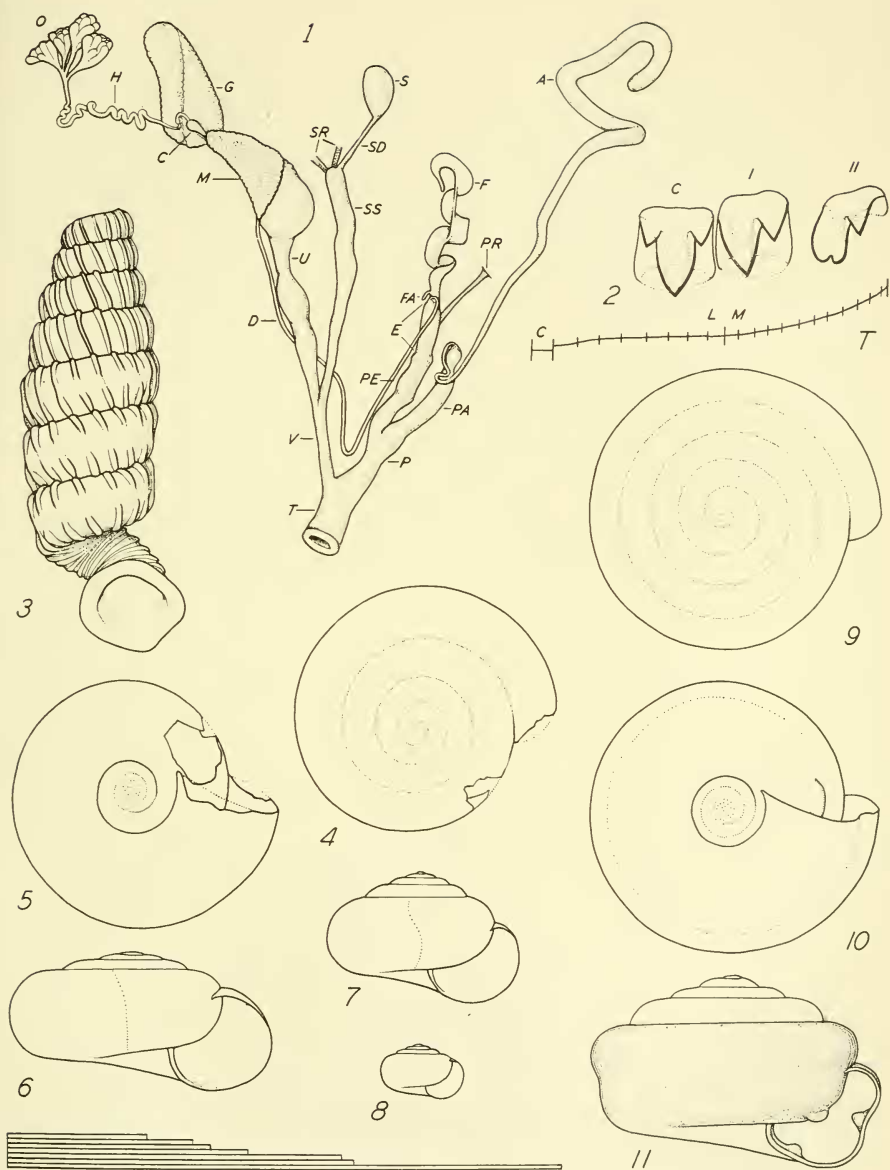


Plate 8. Uppermost scale is for figs. 7 and 8, second for fig. 2, third for fig. 2T, fourth for fig. 1, fifth for fig. 3, sixth for fig. 6 and lowest for fig. 11; second represents .05 mm., third .2 mm., and the others 5 mm.

1, 2. *Proserpinula discoidea*. 3. *Brachypodella costulata savlamari*. 4-6. *Hyalosagda haplotrema*. 7. *H. spreta*, E.J.2. 8. *H. angustispira*, E.E.J. 9-11. *Volvidens triodon*.

